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Fluorescent Dye Doped Optical Waveguide

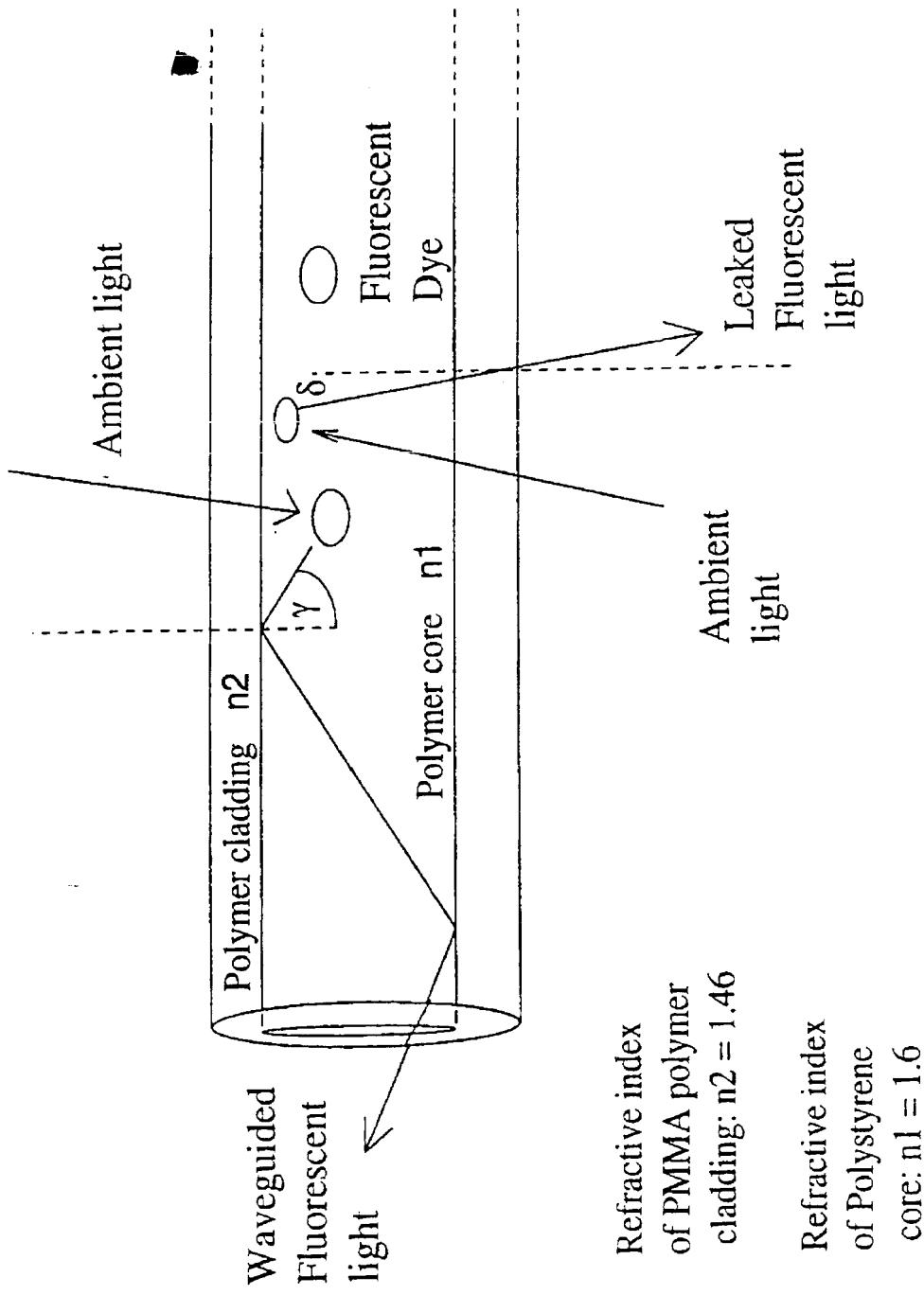


Fig 1

U9/744709

WO 00/07039

PCT/GB99/02482

Absorption-Emission spectra of Nile Red in polystyrene

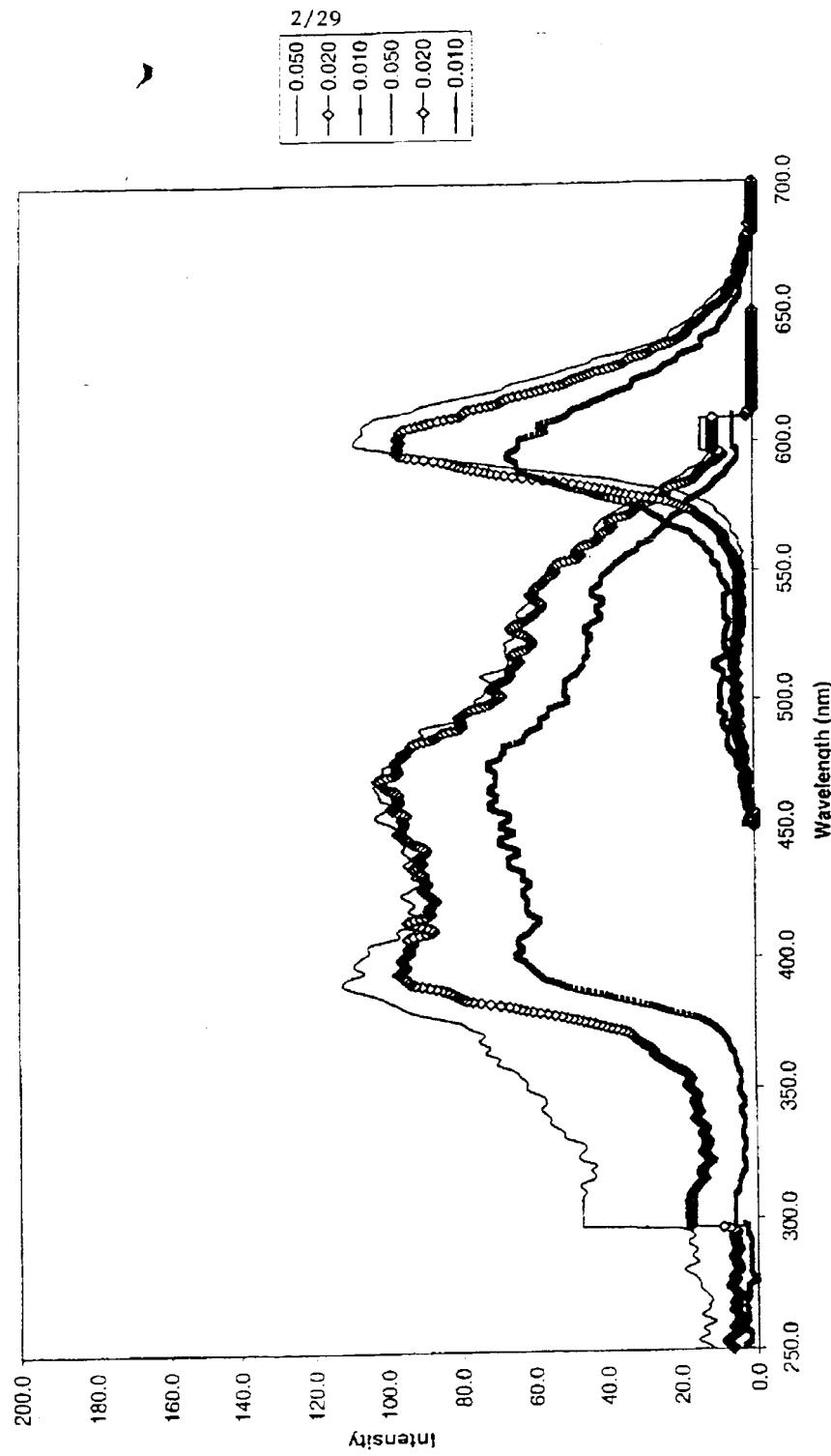


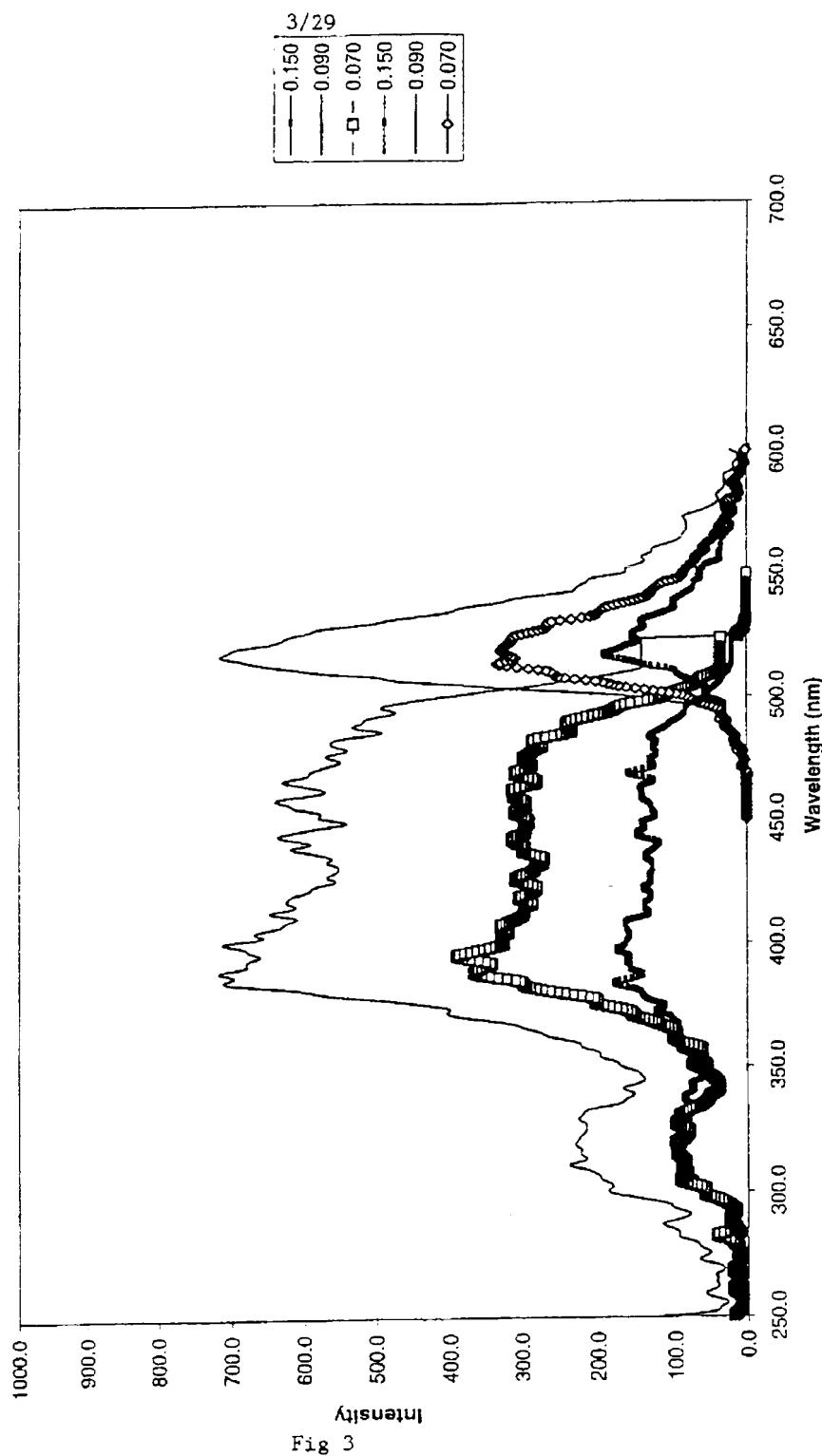
Fig 2

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Absorption-Emission spectra of Coumarin 6 in polystyrene



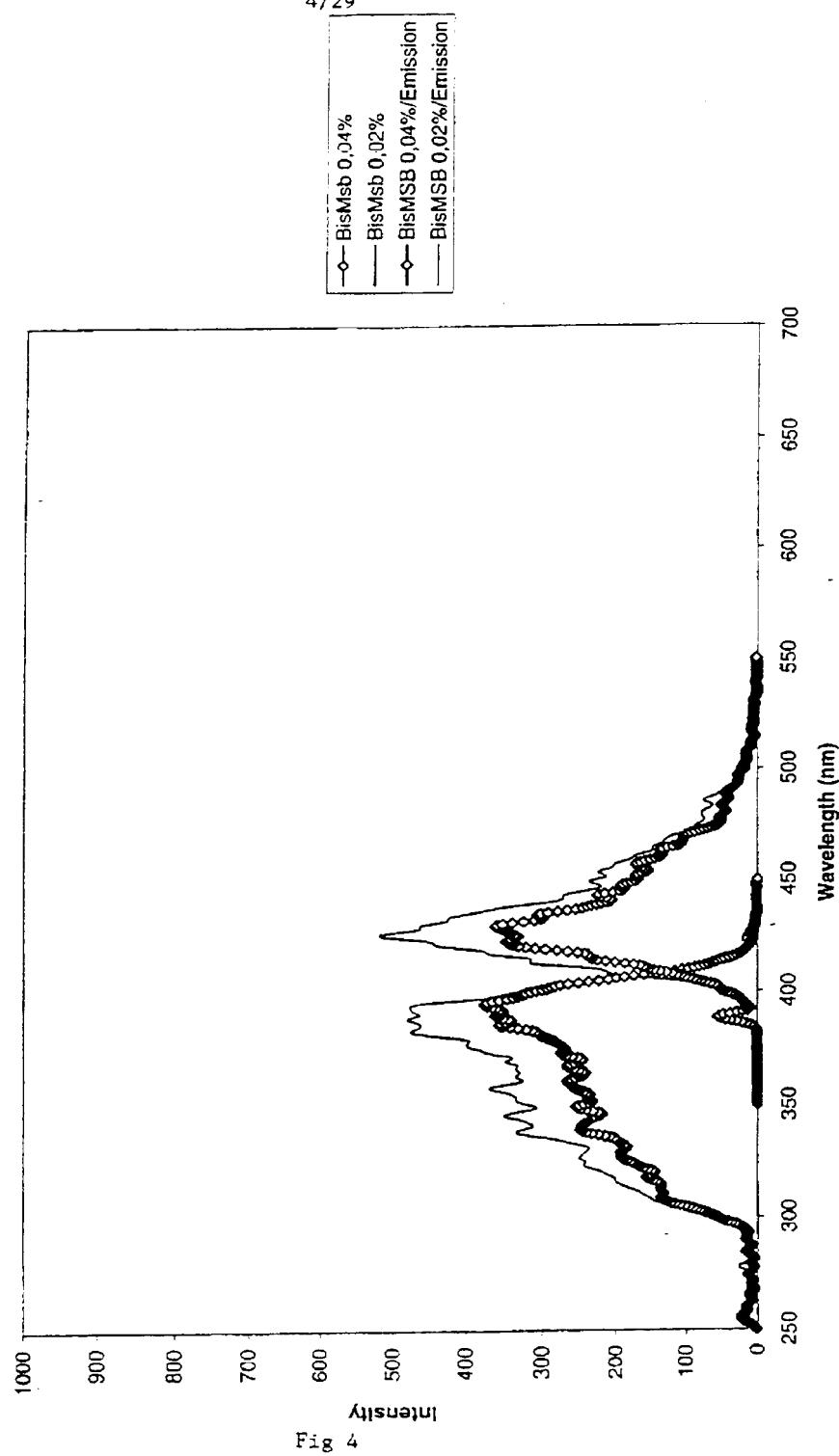
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Absorption-Emission spectra of BisMSB



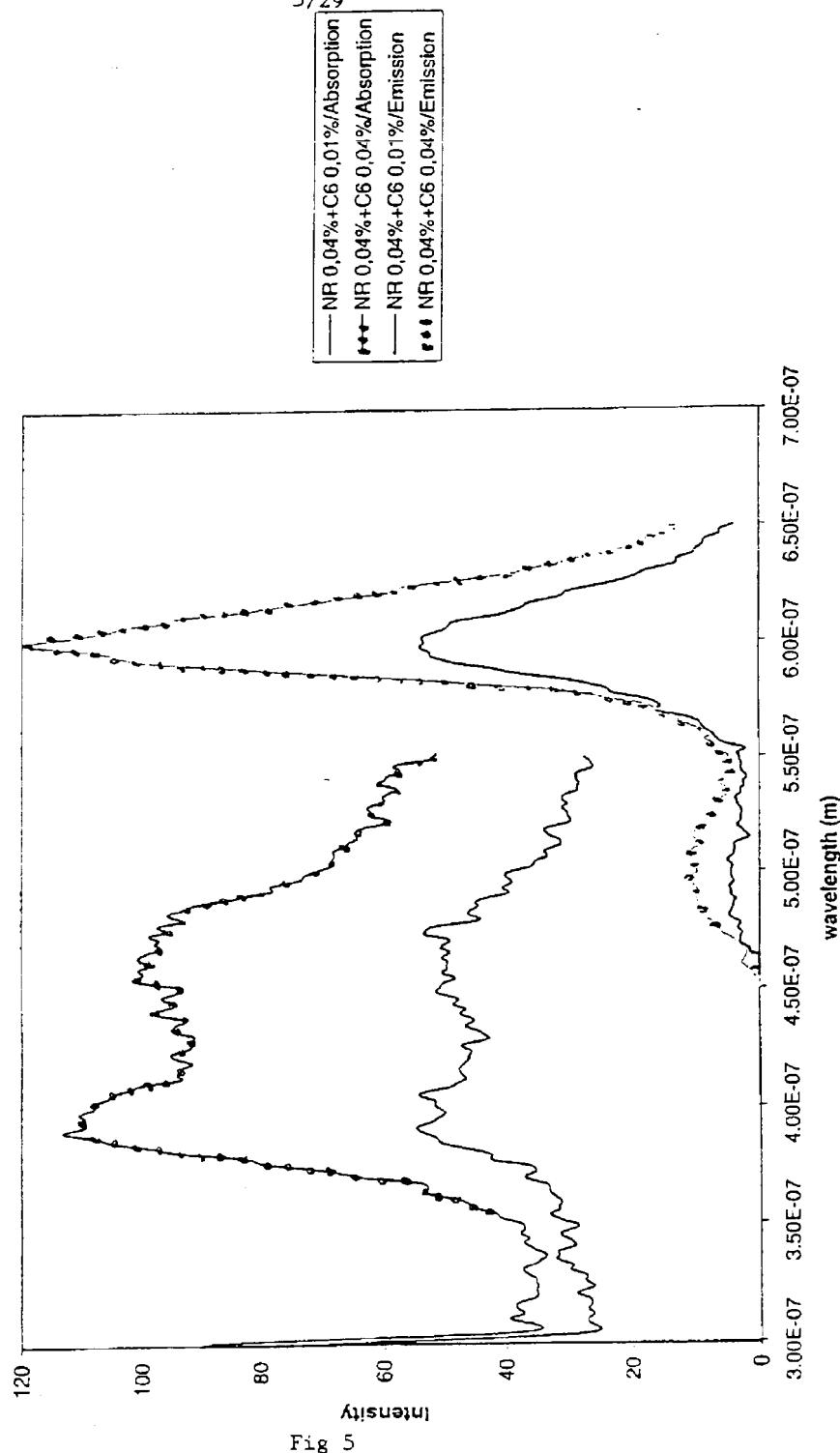
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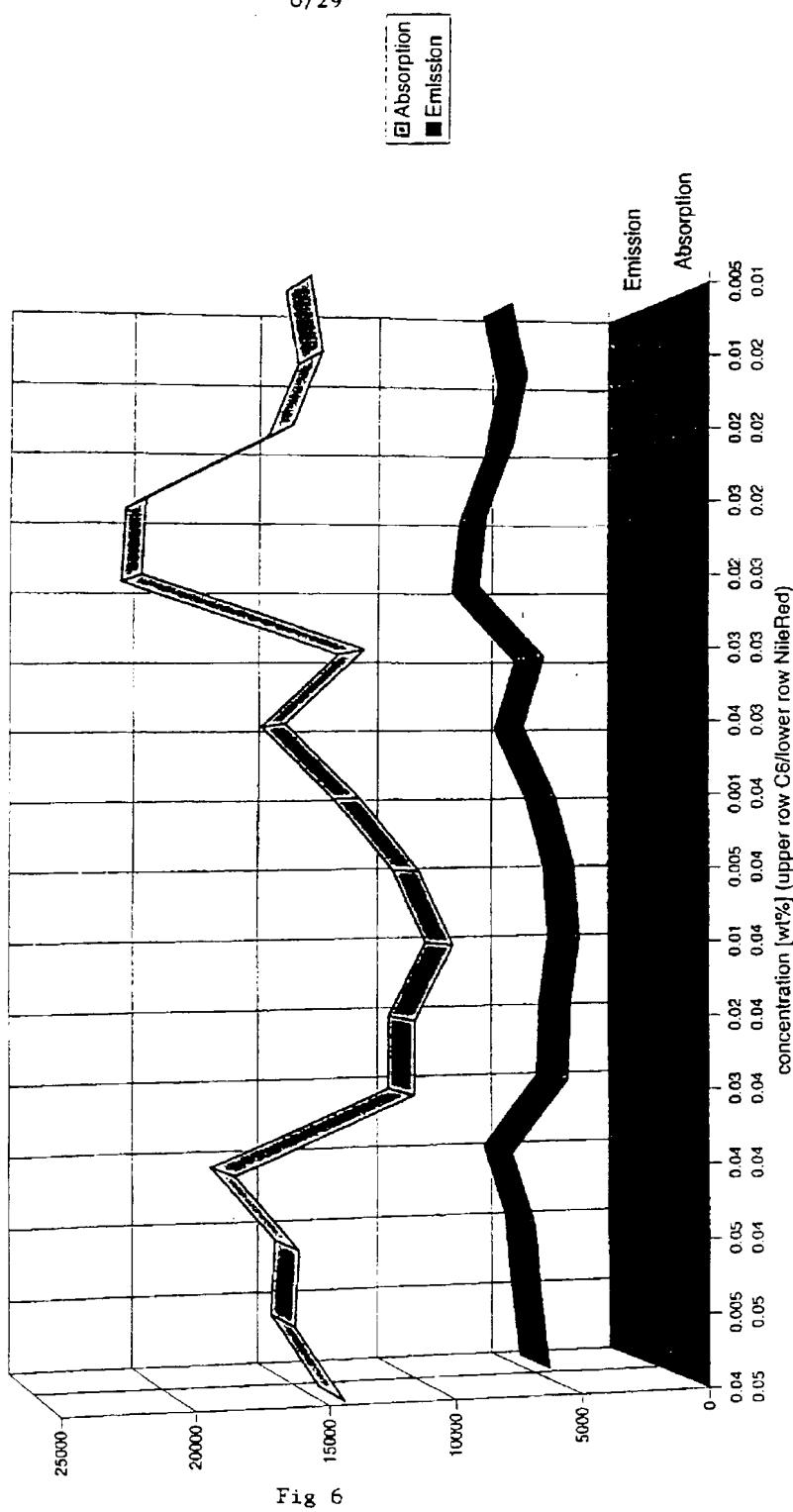
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NR 0,04 wt % + C6 in Polystyrene
vs. wavelength



Nile Red + Coumarin 6

Nile Red + Coumarin 6 in Polystyrene



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Absorption - Emission Area of Nile Red 0,04% + Coumarin 6 + BisMSB

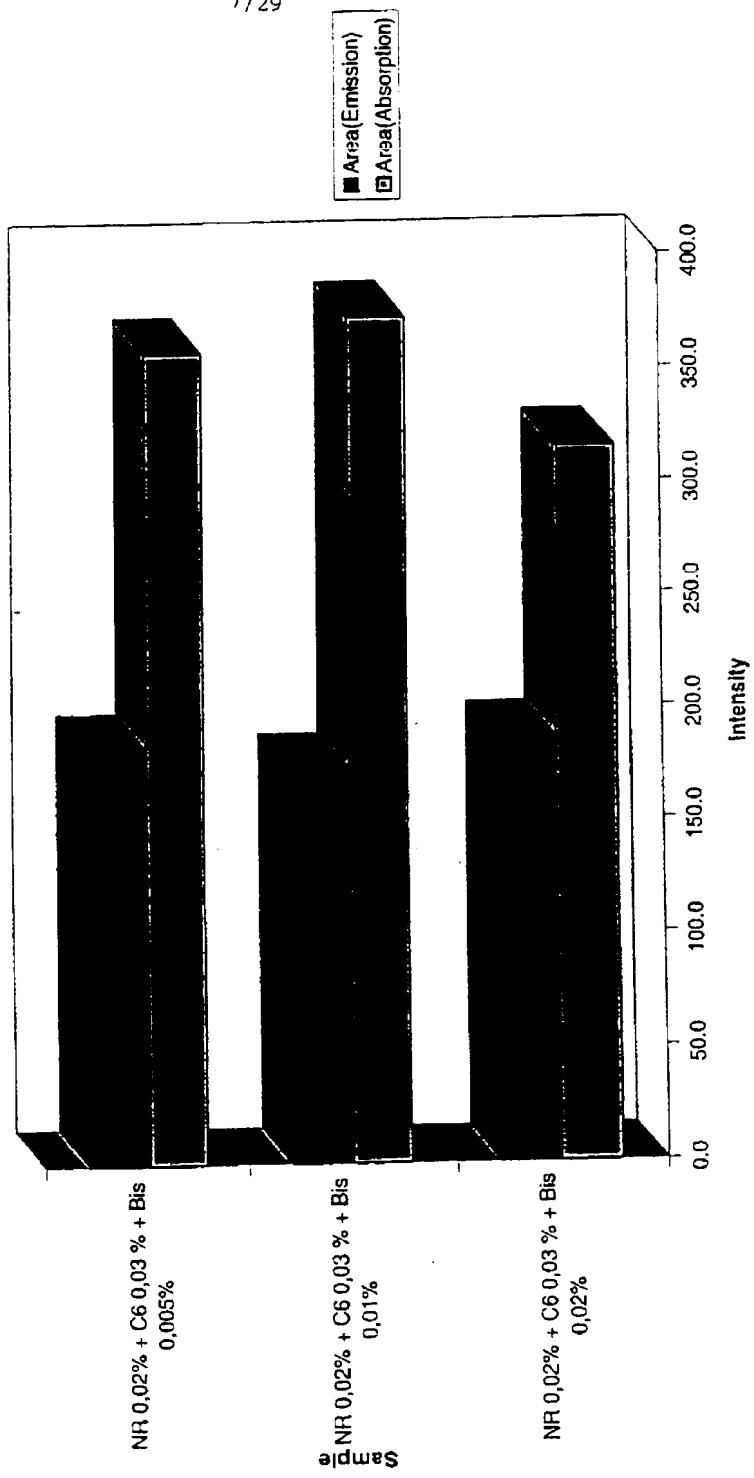


Fig 7

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Quantum Yield of Coumarin 6 in polystyrene

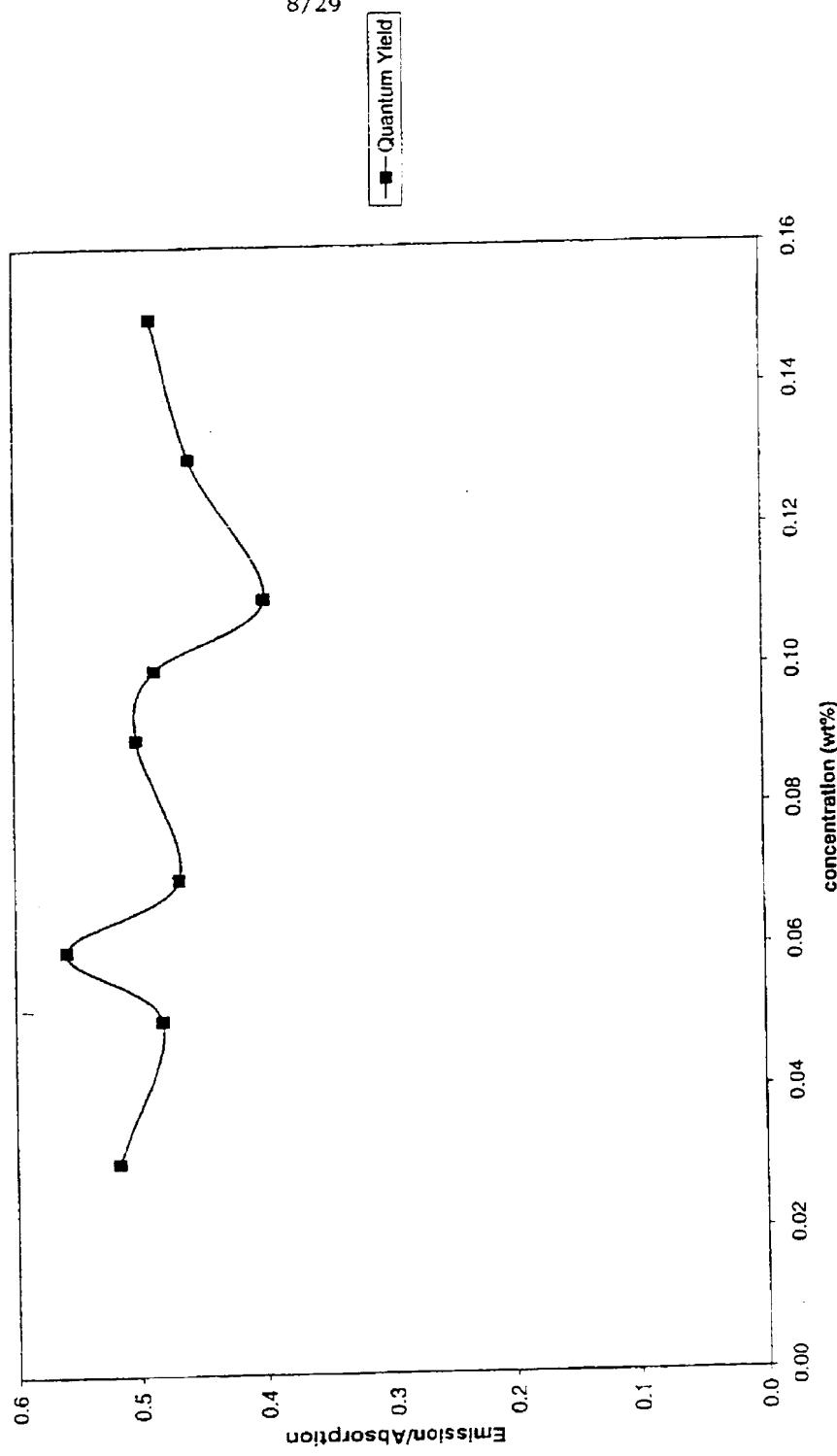


Fig 8

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Absorption-Emission Area of Coumarin 6 in polystyrene

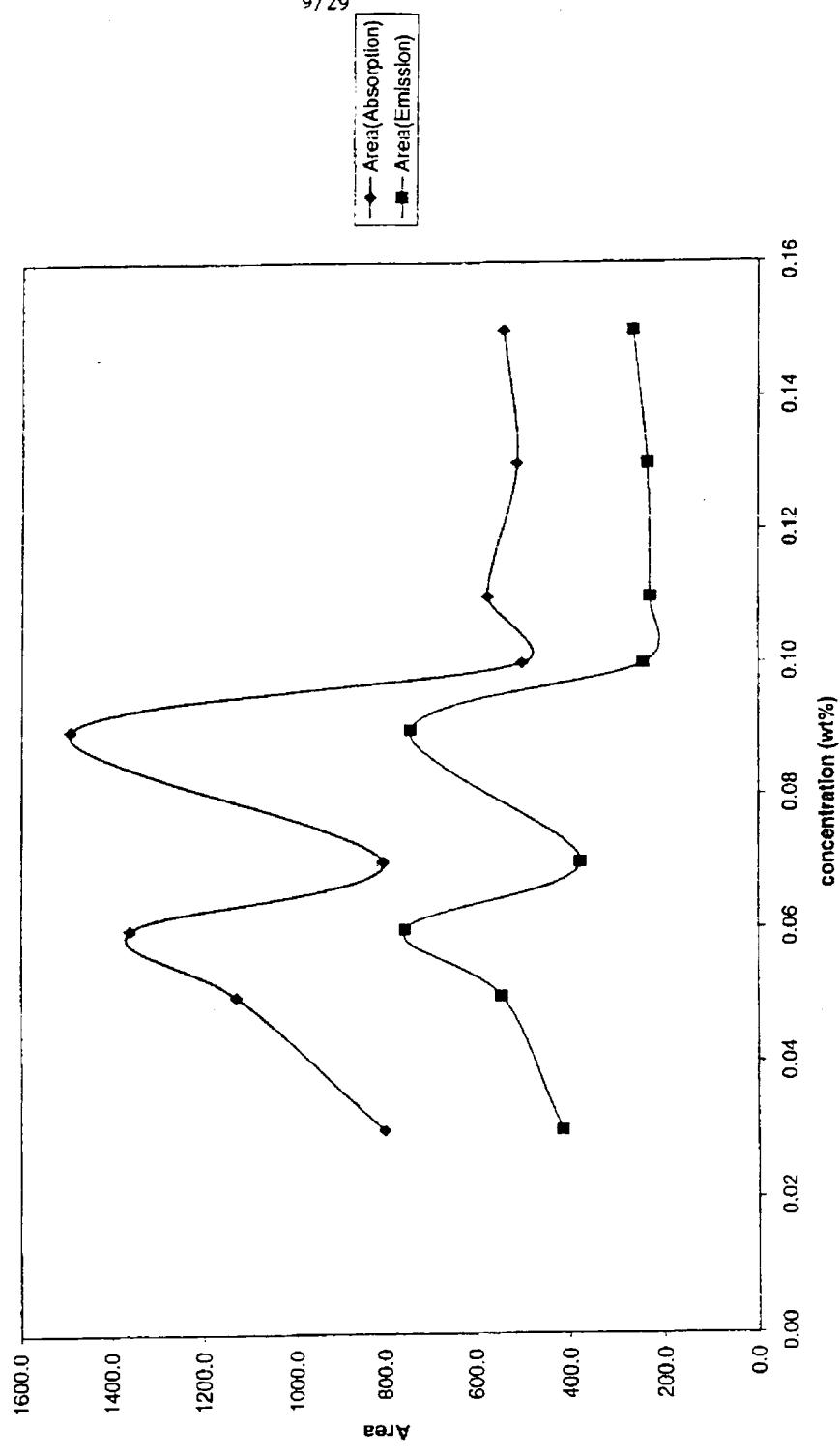


Fig 9

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Quantum Yield of BisMSB in polystyrene

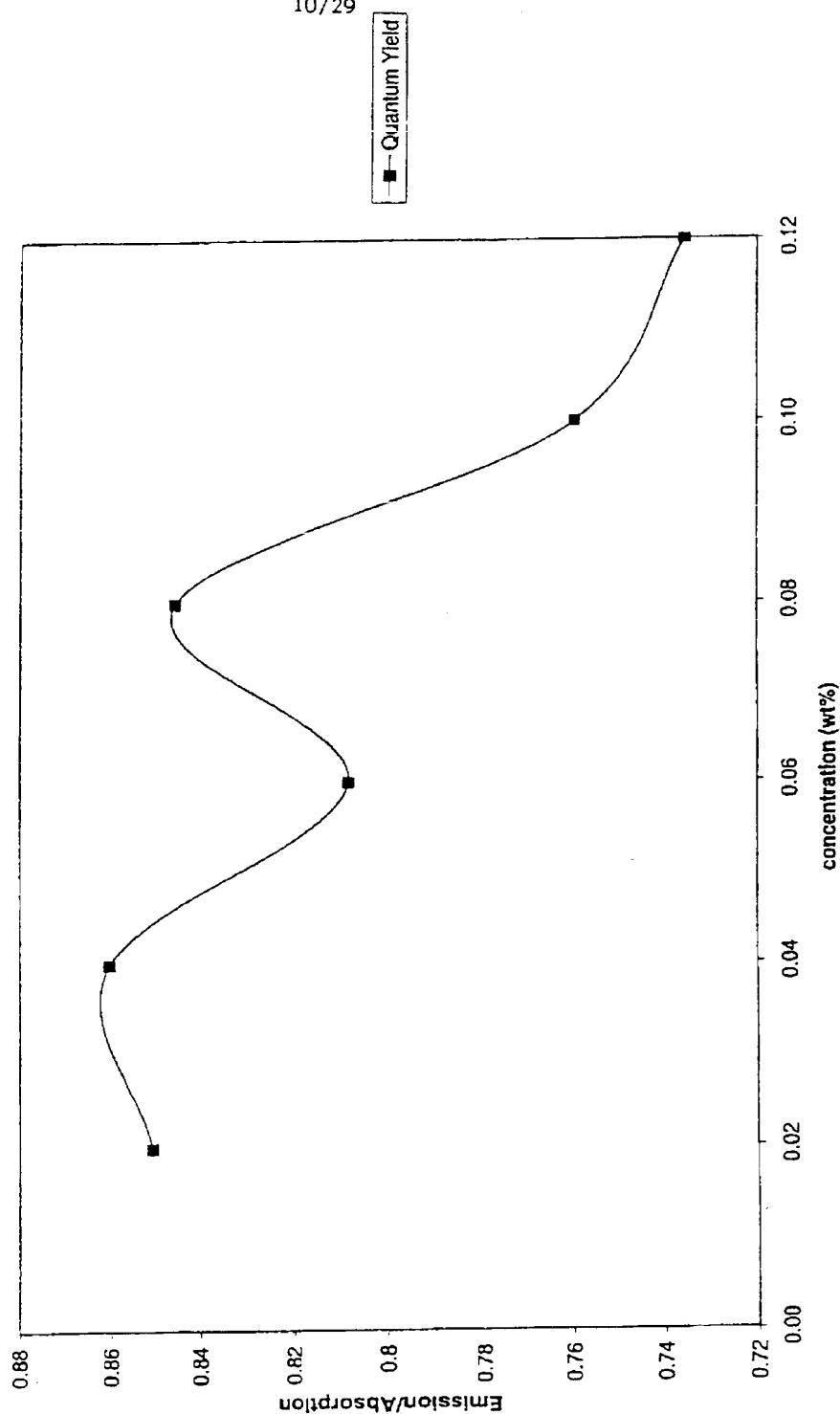
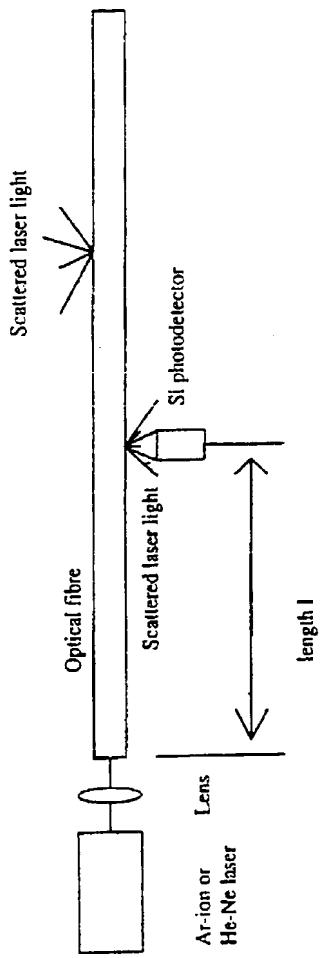


Fig 10



Arrangement for light scattering/Absorption measurements

Fig 11

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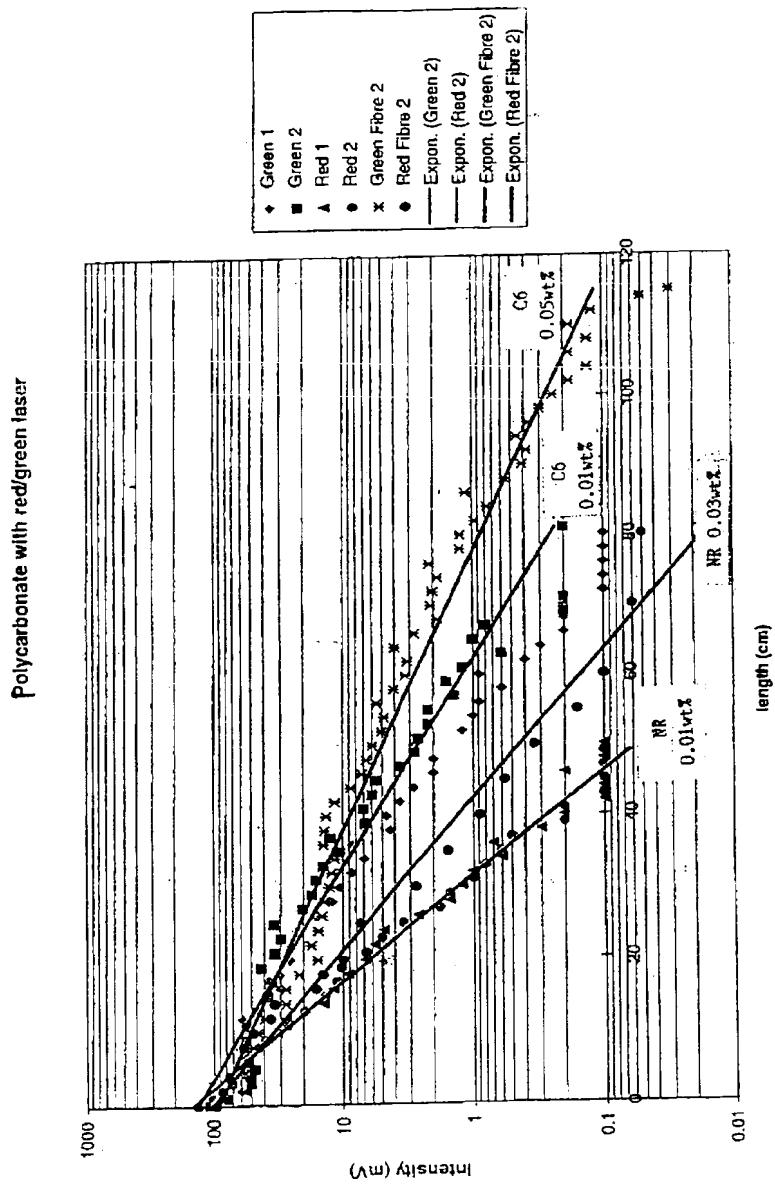


Figure 12

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Refractive Index of C6 doped polystyrene

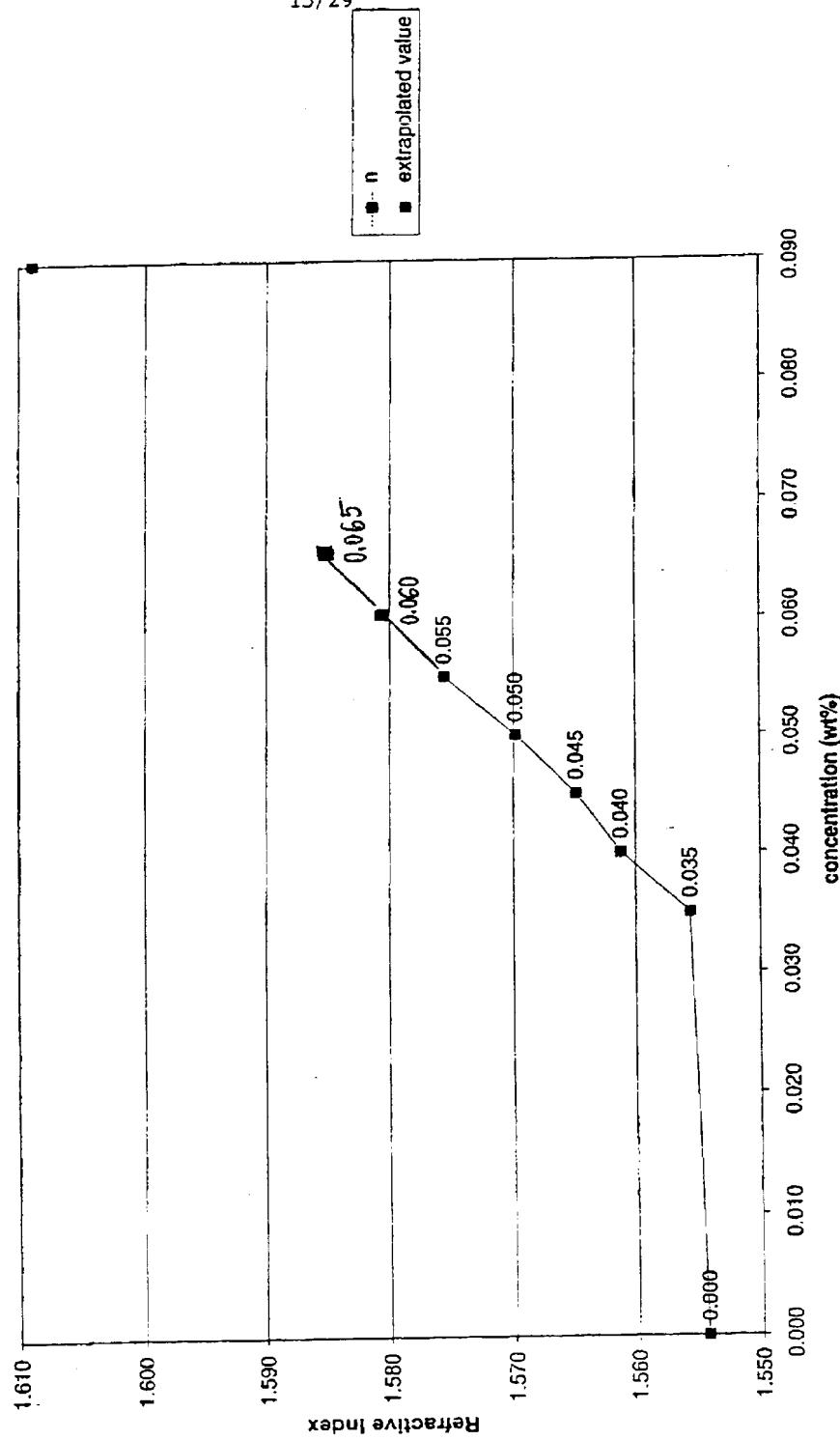


Fig 13

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Intensity of the green/red fibre in sunlight while fibres are partially covered (normalised and an average of 7 measurements/ y-errors equals 2sigma)

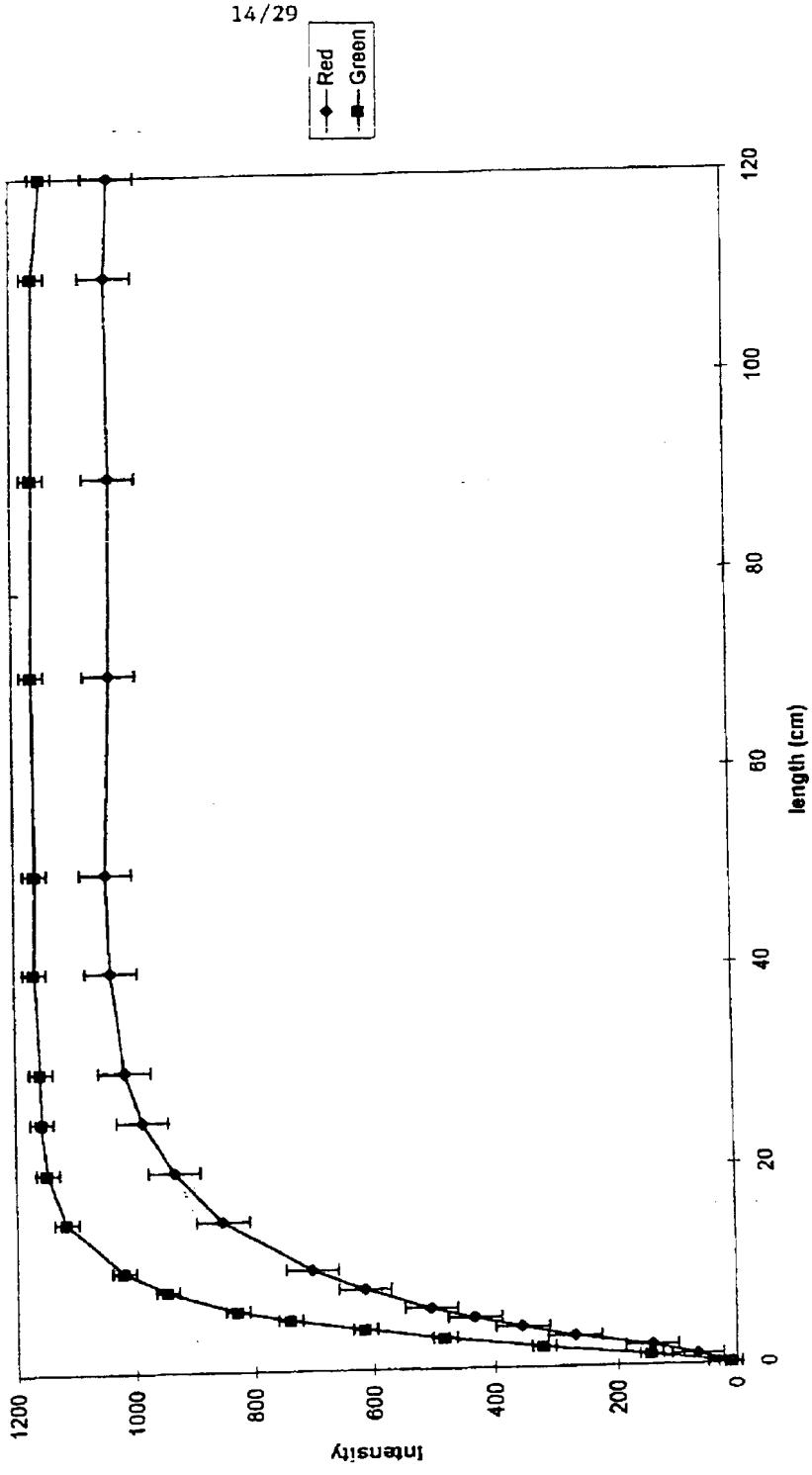
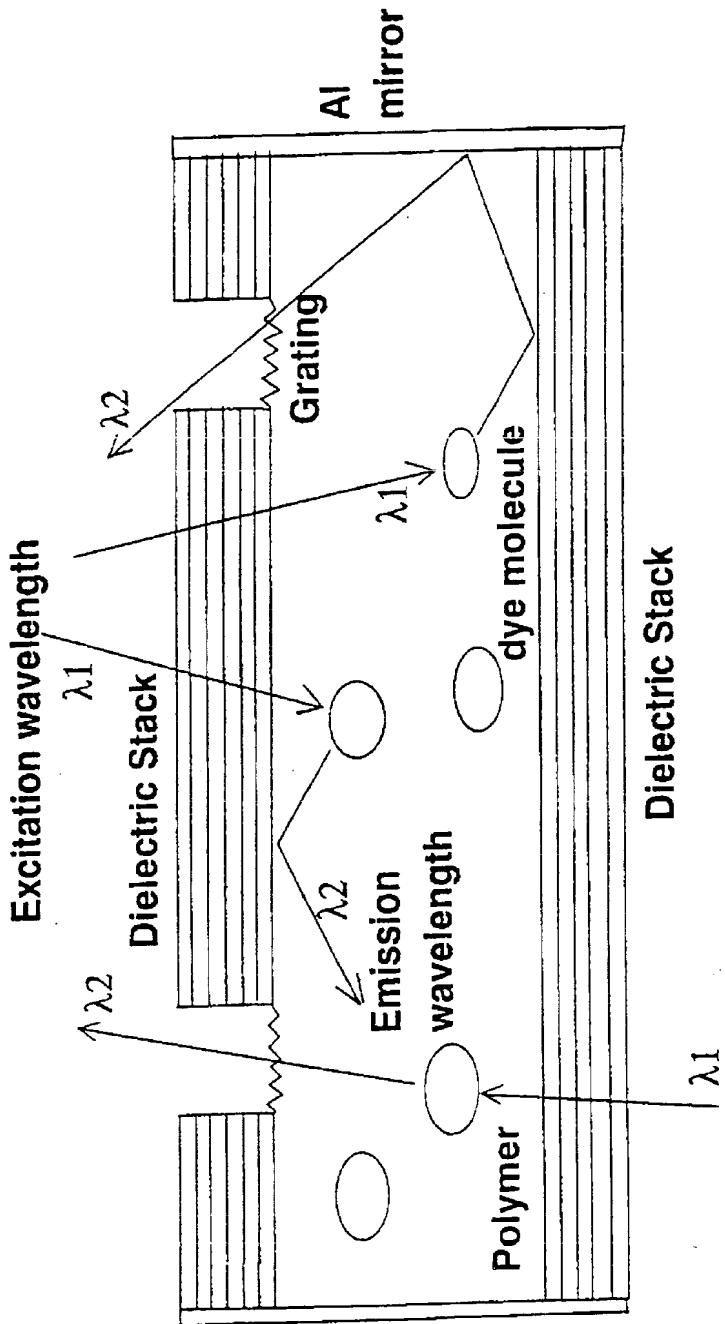


Fig 14

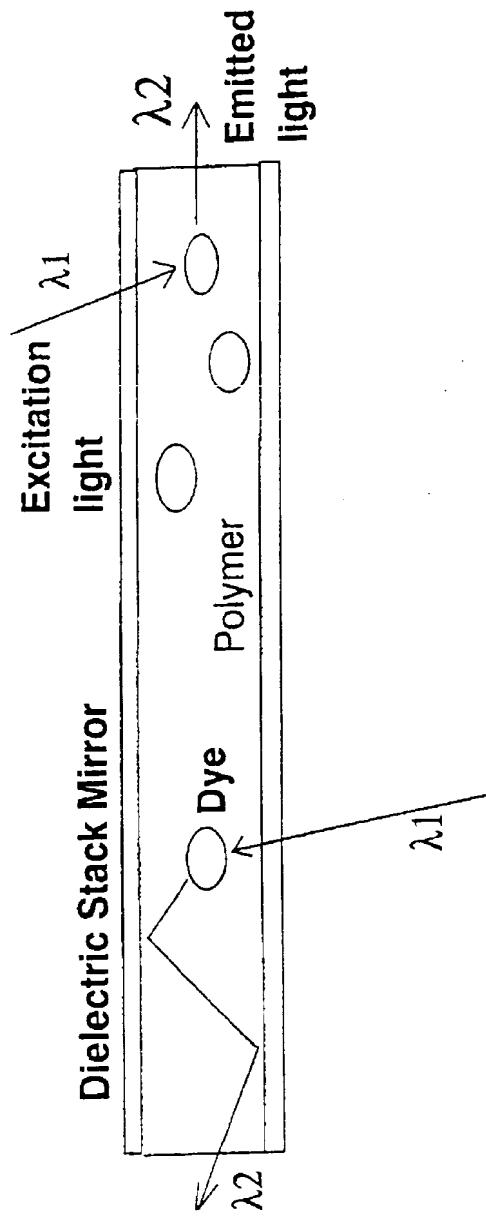
Structure of Light Emitting Polymer in combined reflective and transmissive mode

Figure 15



Structure of Light Emitting Polymer in the Edge Emitting Mode

Figure 16



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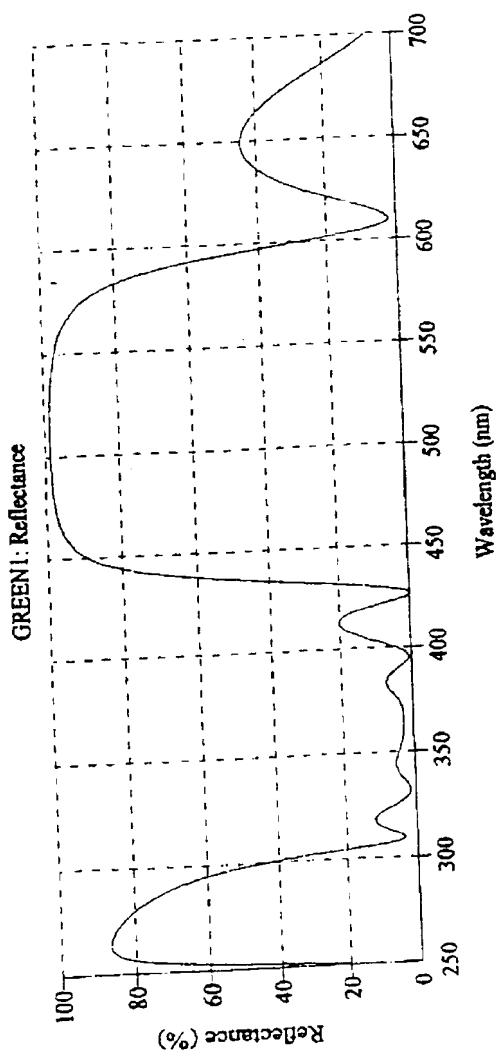


Fig 17

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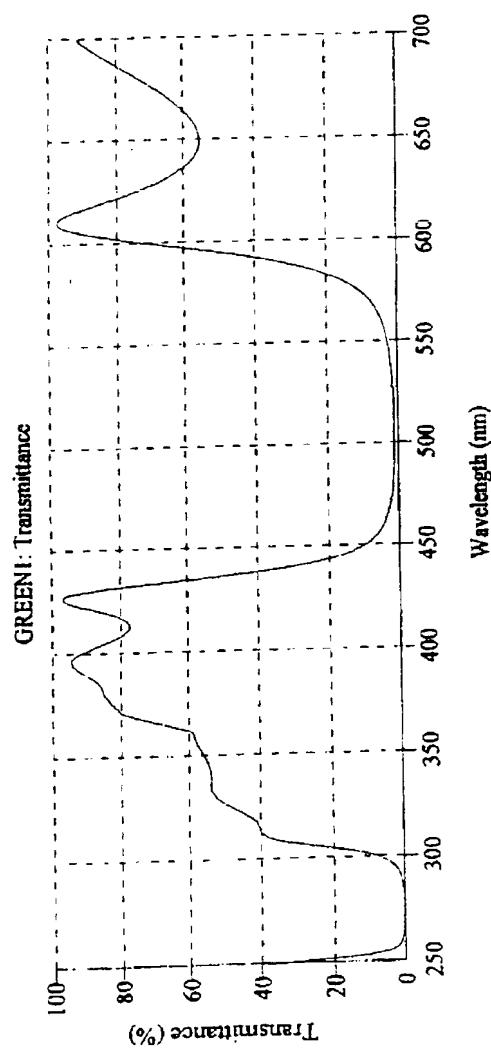


Fig 18

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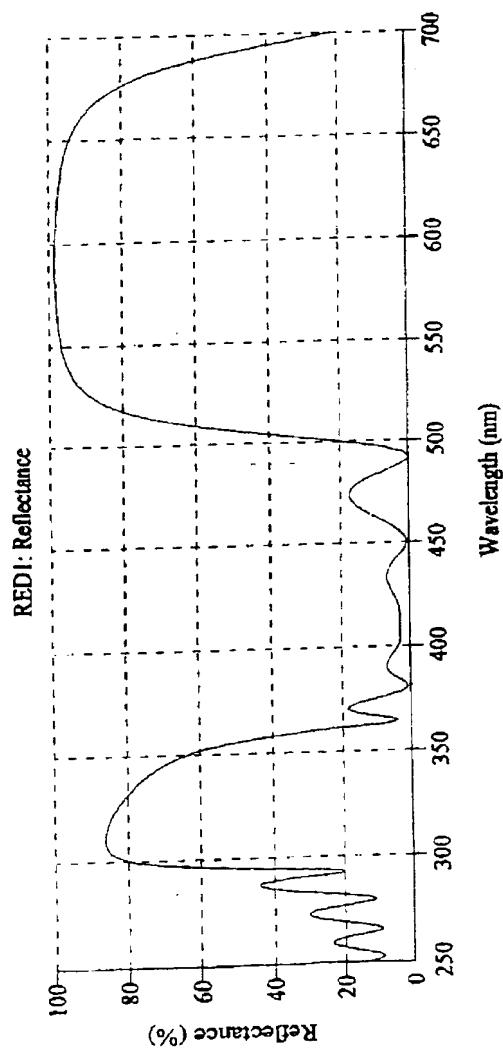


Fig 19

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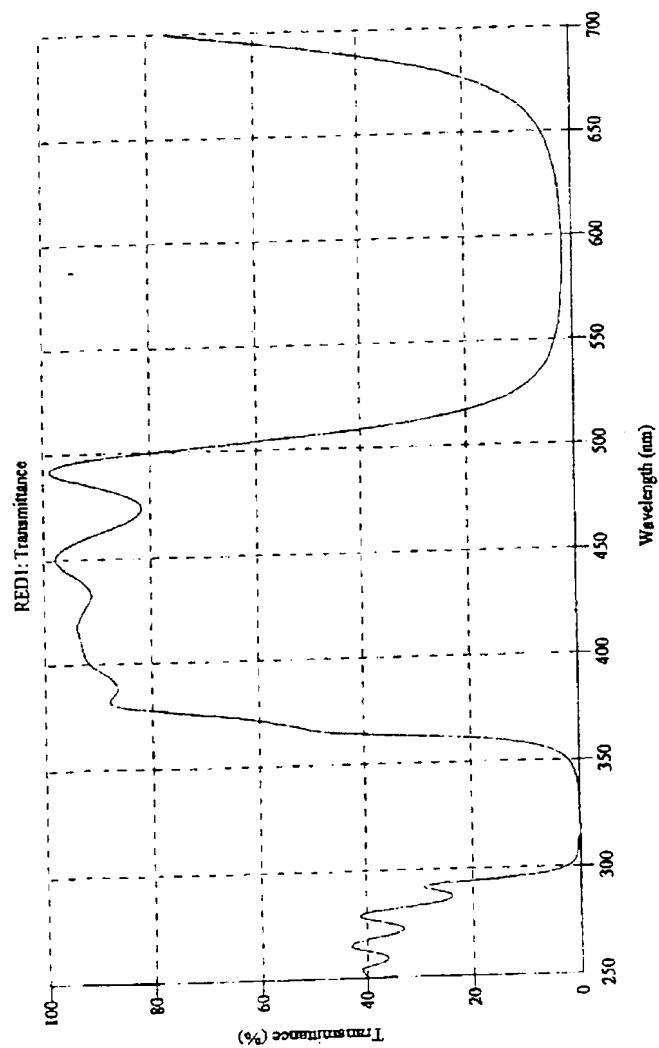


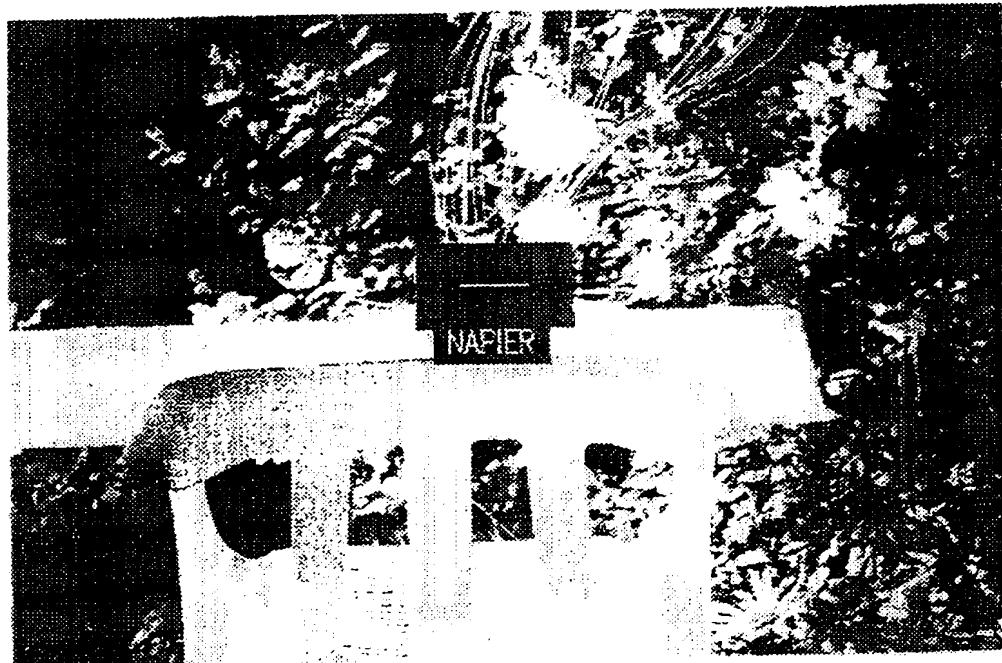
Fig 20

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Full Sunlight

Figure 21

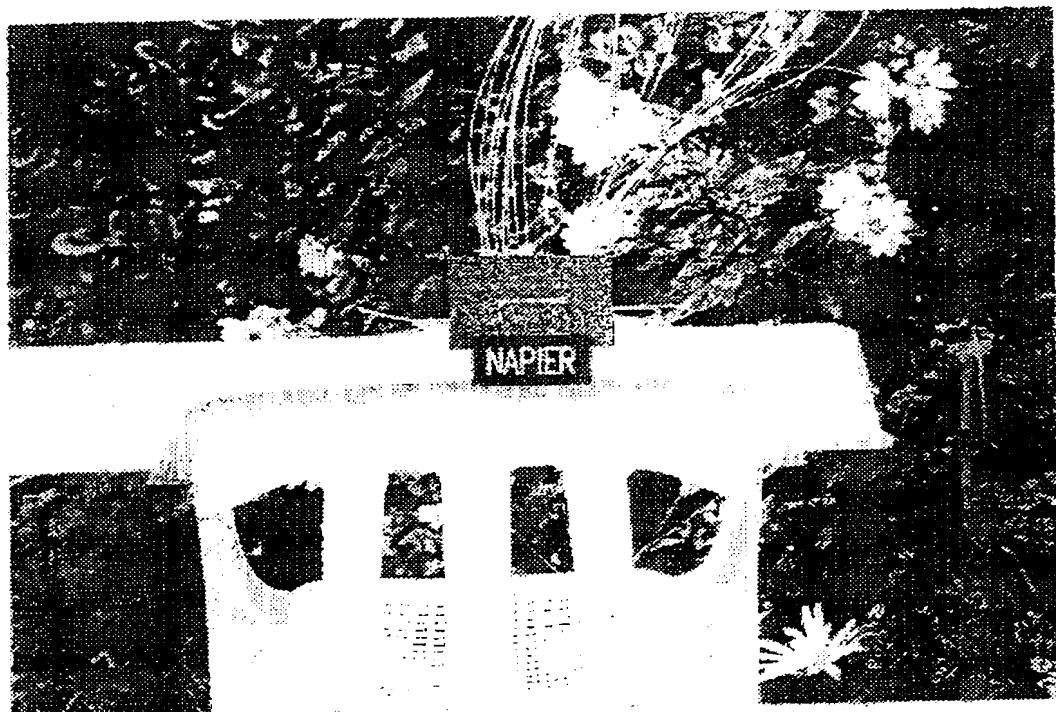
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Cloudy

Figure 22

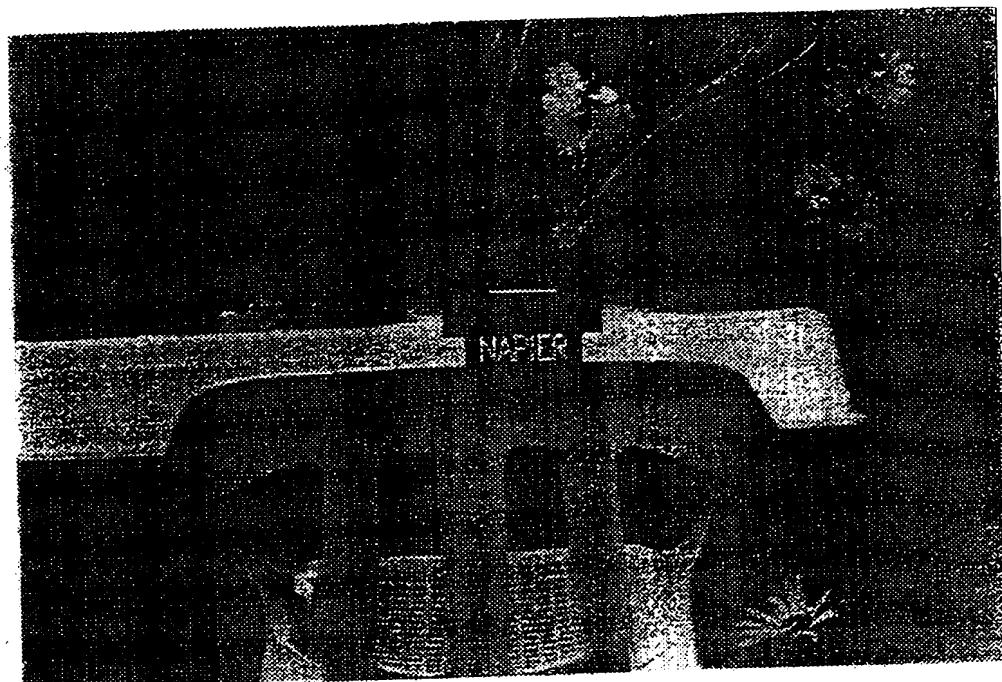
SUBSTITUTE SHEET (RULE 26)

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PCT/GB99/02482

WO 00/07039

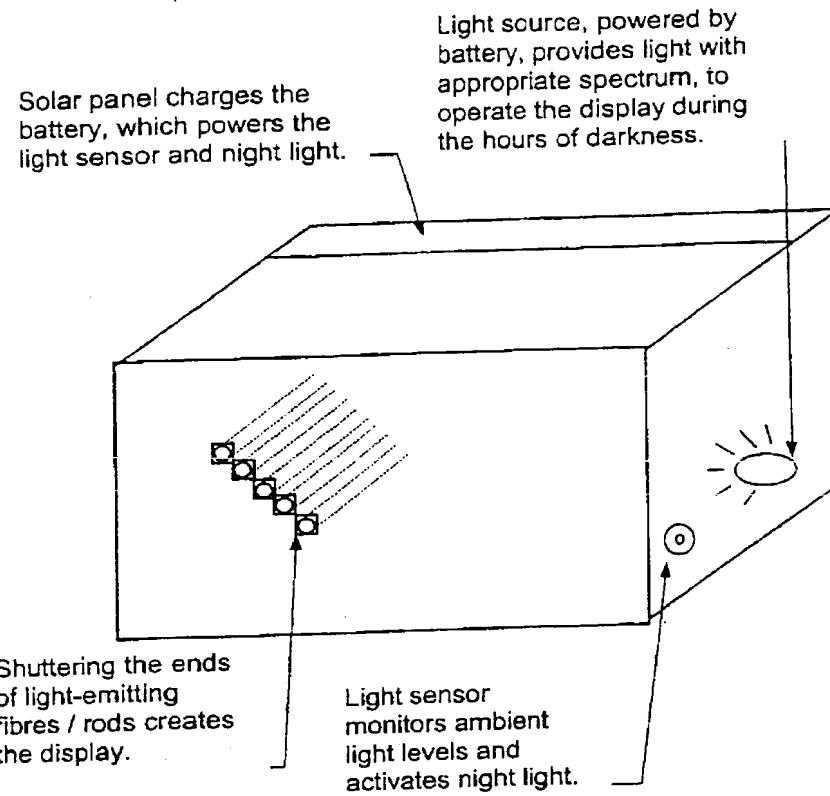
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**Late Evening
(2 Hours After Sunset)**

Fugure 23

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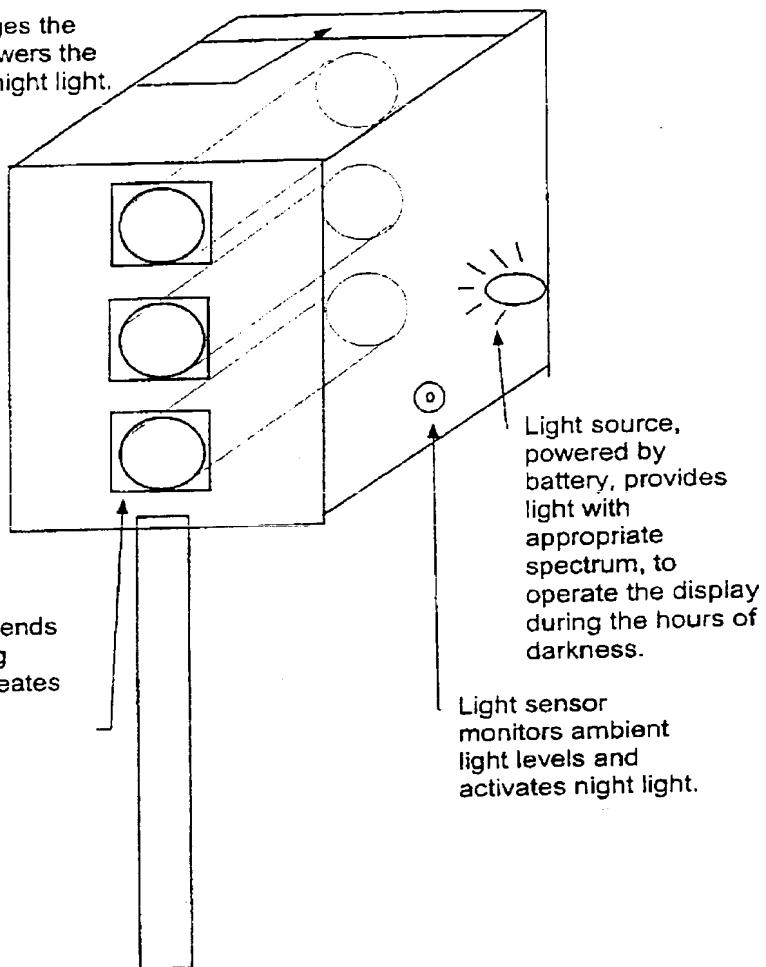
24 Hour Road Signage

Fig 24

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Solar panel charges the battery, which powers the light sensor and night light.

Shuttering the ends of light-emitting fibres / rods creates the display.

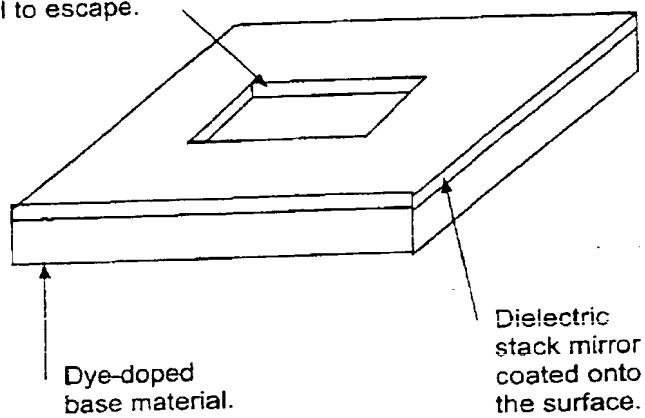


24 Hour Traffic Lights

Fig 25

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Dielectric stack mirror removed from the surface, permitting the trapped light from the bulk material to escape.



Fixed Advertisement.
Polymer sheet with dielectric stack
mirror coated on the surface

Fig 26

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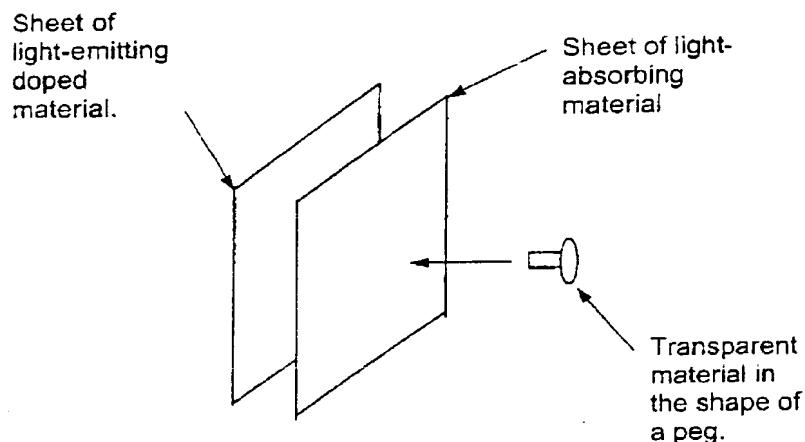


Fig 27

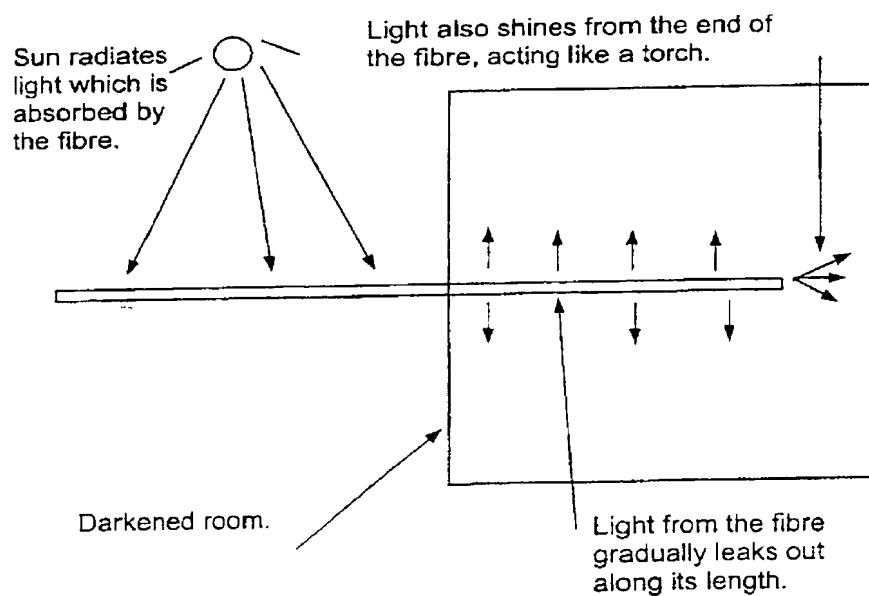


Fig 28

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Light-emitting
rods angled
towards
aircraft.

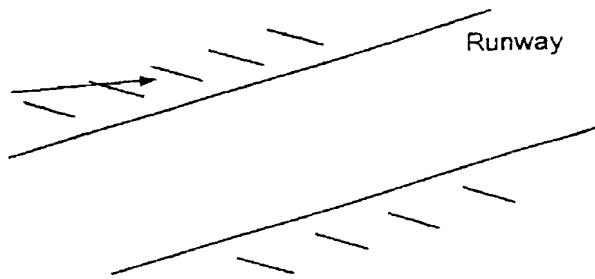


Fig 29

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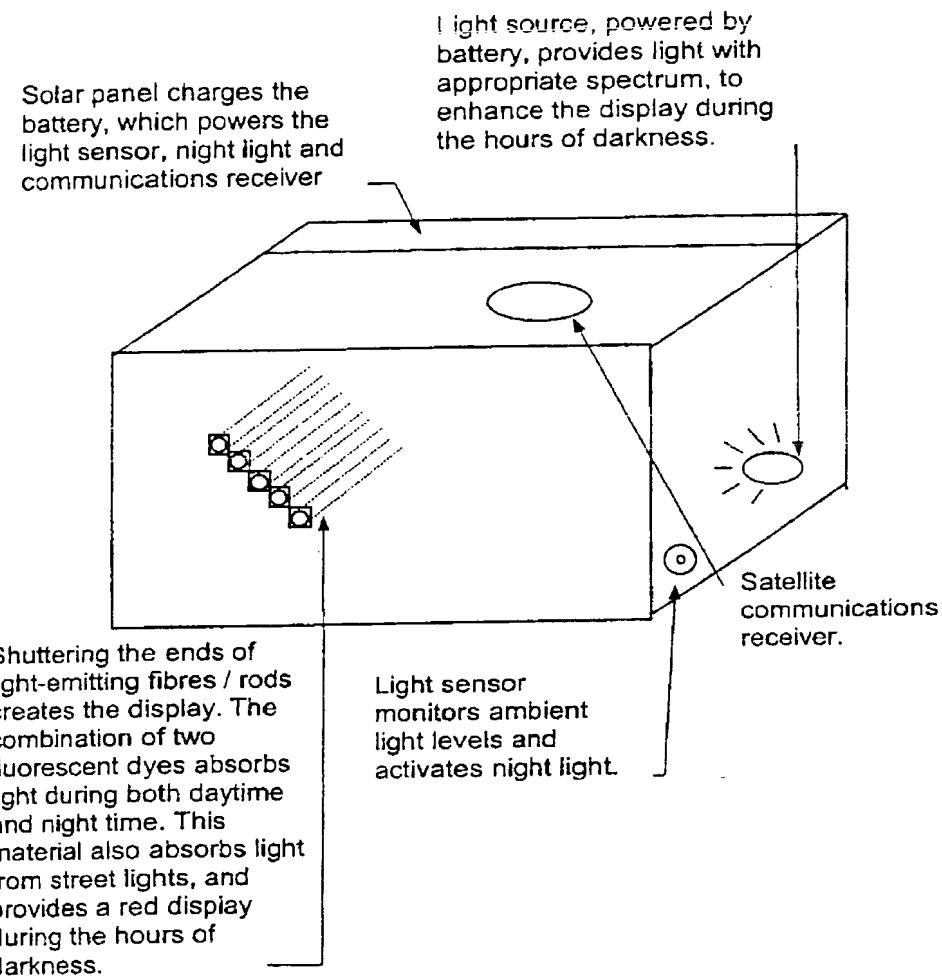


Fig 30